

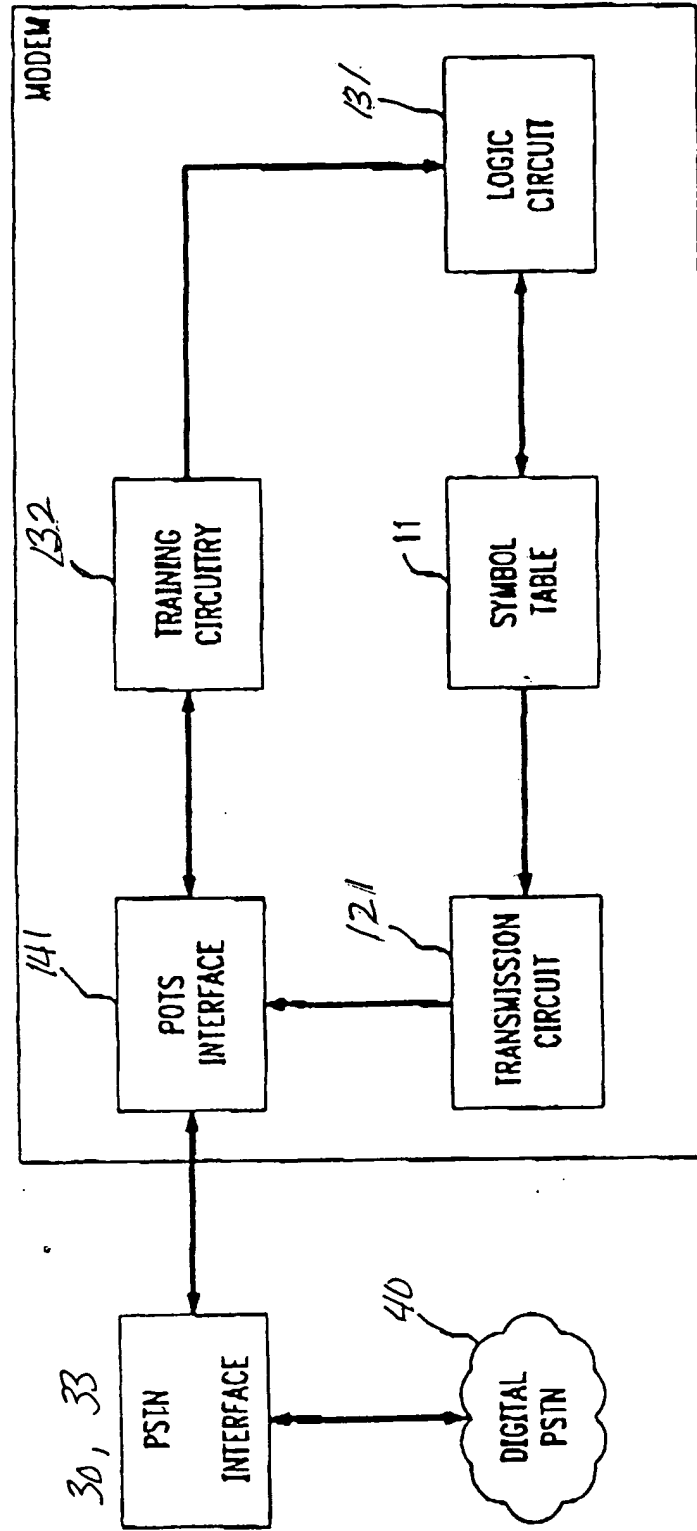
Figure 1

Frame	Sign and Training Pattern					
	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6
1	+R	-T	-R	+T	-R	-T
2	+T	+R	-T	+R	+T	-R
3	+R	+T	-R	+T	-T	-R
4	-T	+T	+R	+T	-T	+T
5	+T	-R	-T	+T	-T	+R
6	-T	+T	+T	-T	-R	-T
7	+T	-T	+T	+R	+T	-T
8	-R	-T	+T	-T	+T	-T
9	+T	+R	+T	-T	+R	-T
10	+R	-T	+T	+R	-T	-R
11	-T	+T	-T	-T	+T	+T
12	+T	-R	-T	+T	+R	+T
13	-R	-T	+T	-R	-T	+T
14	-T	+T	-R	+T	-T	+R
15	-T	+T	+R	-T	+R	+T
16	-T	-R	+T	-R	-T	+R
17	-T	-T	+R	+T	+T	-T
18	+T	+R	-T	-T	+T	-T
19	-R	+T	-T	-T	-R	+T
20	+T	-T	-T	-R	+T	+T

The "T" in the table represents a training amplitude.
The "R" in the table represents a reference amplitude.
The "+" or "-" represents the sign of the symbol.

Figure 2

Figure 4



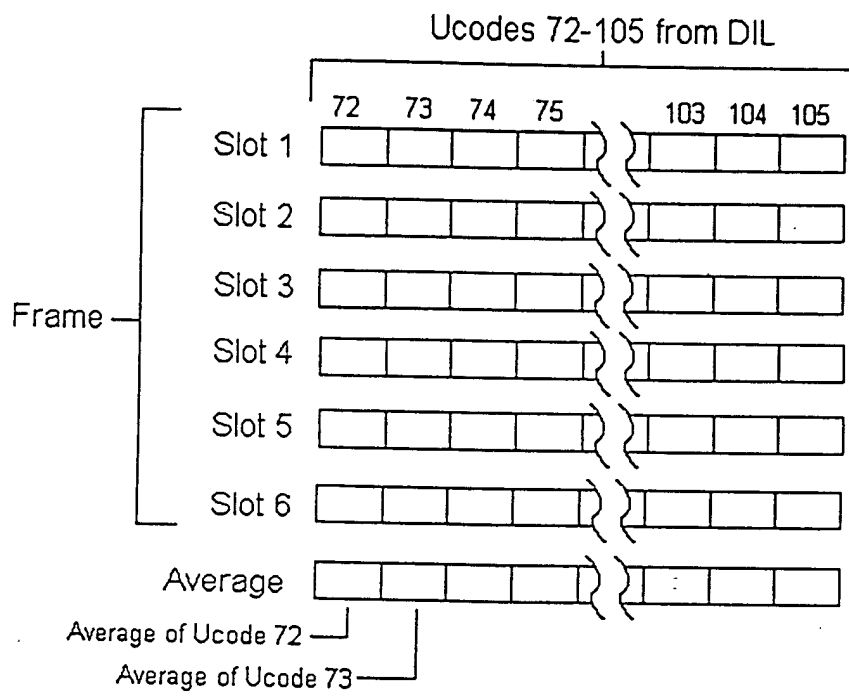


Figure 5

-45dB 3rd Order IMD

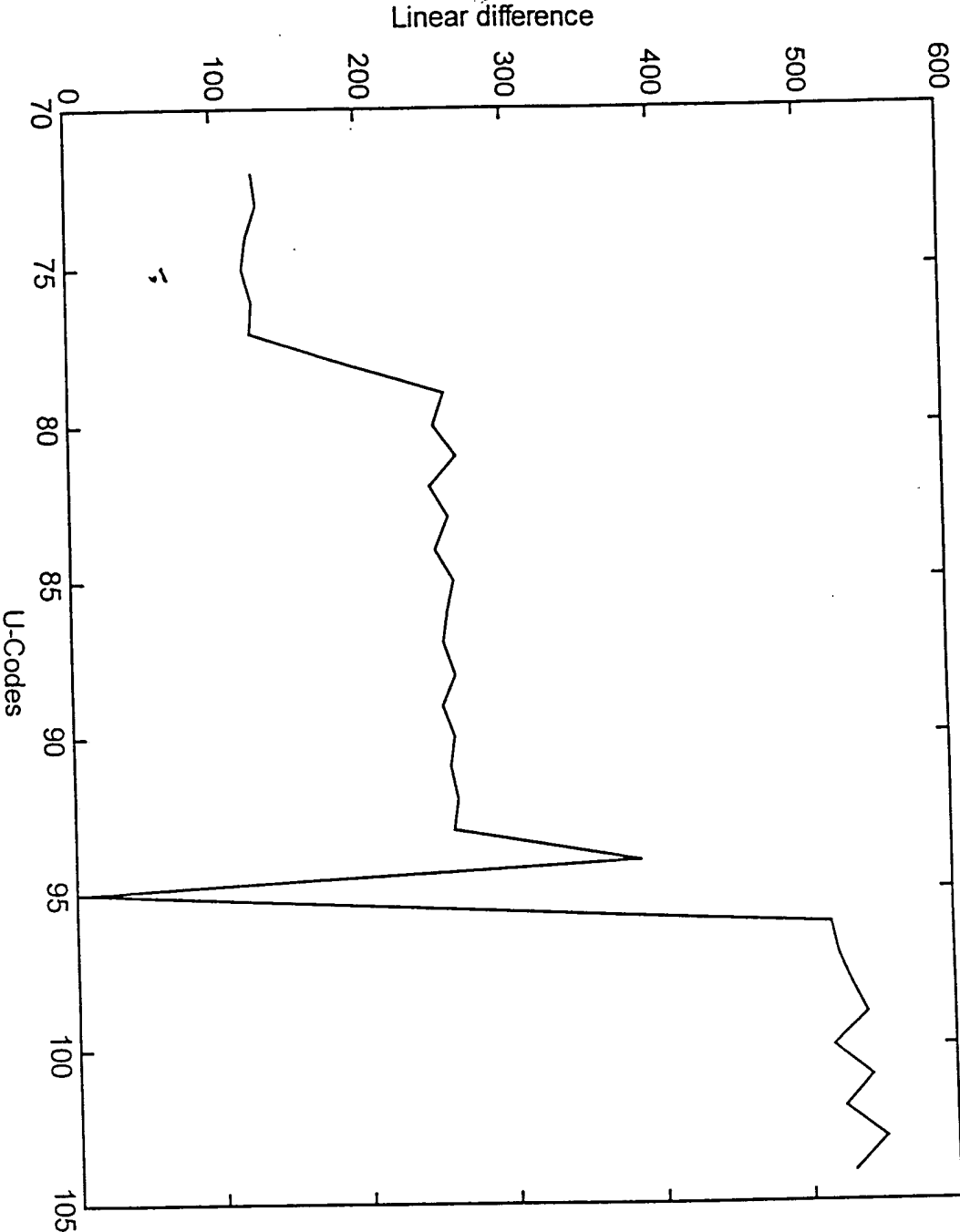


Figure 6

[illegible]

Smoothed Differences between U-Codes 72 to 105
-45dB 3rd Order IMD

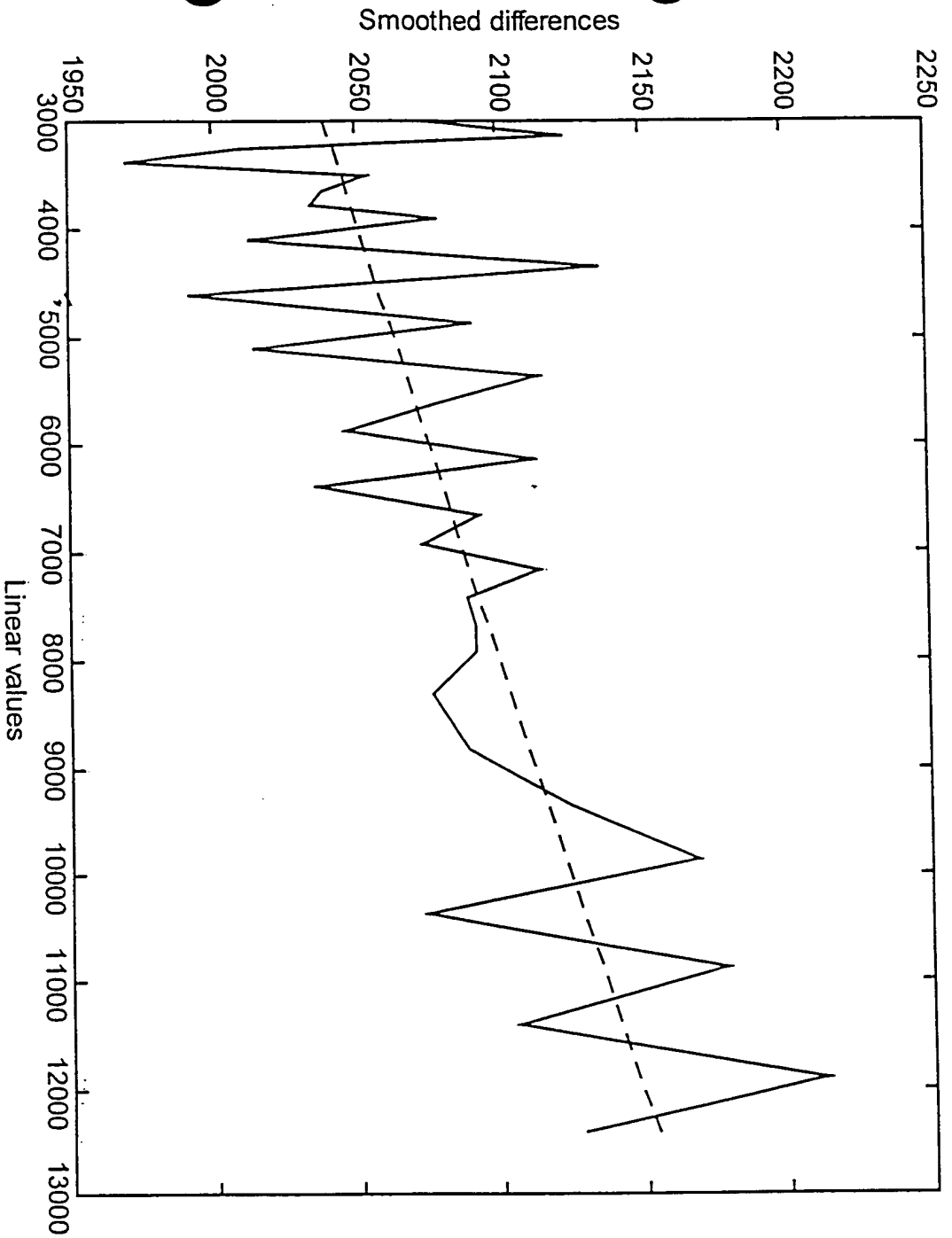
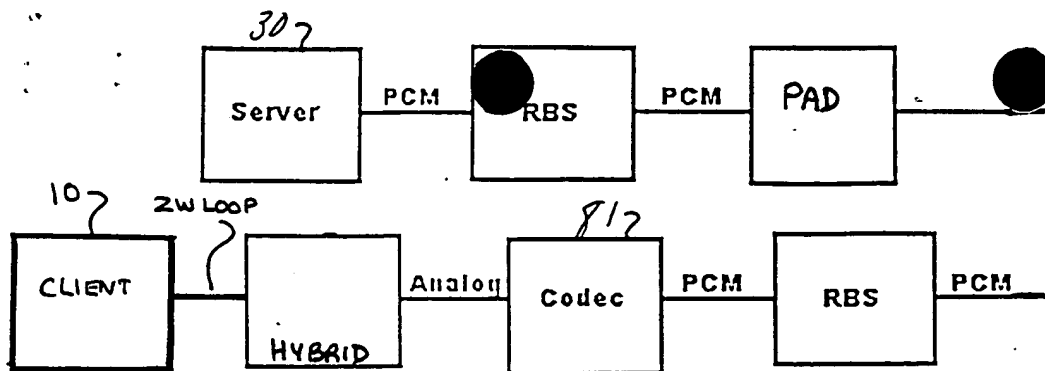


Figure 7

00509590 - 062400



PCM - an 8-bit μ -law or A-law digital symbol transmitted over the network. The symbol represents a signal amplitude.

Linear - the linear value corresponding to the digital symbol (see G.711).

Analog - the local twisted-pair from the central office to the modem.

Figure 8

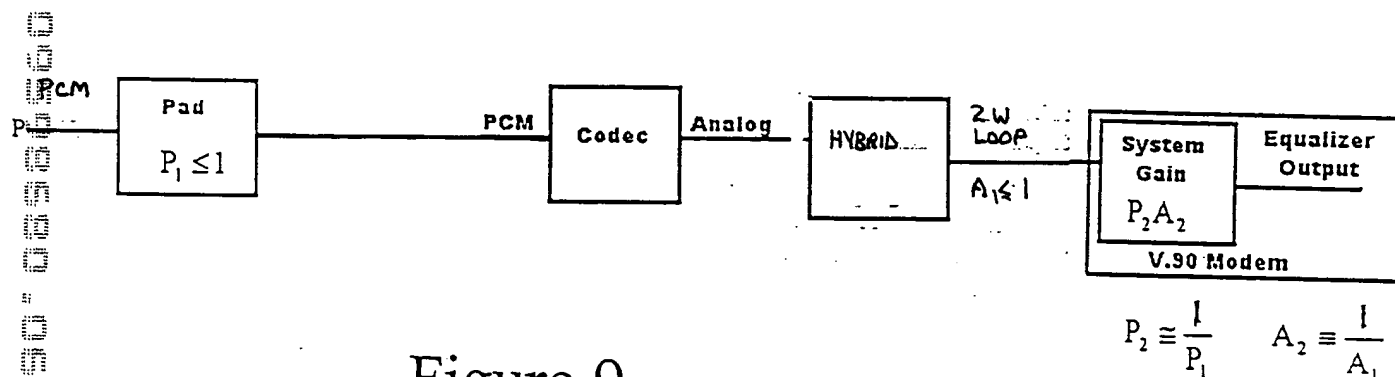


Figure 9

$$\text{Error}_n = \frac{\sum_{n=\text{Ucode72}}^{\text{Ucode105}} |\text{ReceivedSample}_n \cdot \text{Test Fraction} - \text{SLICED}[\text{ReceivedSample}_n \cdot \text{Test Fraction}]|}{\text{Test Fraction}}$$

$\text{SLICED}[x]$ - results in the G.711 value closest to x .

Ucode\# - refers to PCM symbols sent by the server (see V.90 specification)

Received Sample_n - an average received value from the DIL sequence corresponding to Ucode\# .

Test Fraction - a value between 1.0 and 0.25 that is adjusted to result in a minimum error

Figure 10

U-Code Sent	Avg. Received Value	Using 0.5 as the Test Fraction	Absolute Error	Using 0.5077 as the Test Fraction	Absolute Error
90	6673	3337	51	3388	0
91	6925	3463	53	3516	0
92	7178	3589	55	3644	0
93	7430	3715	57	3772	0
94	7682	3841	59	3900	0
95	8060	4030	62	4092	0
96	8060	4030	62	4092	0
97	8564	4282	66	4348	0
98	9068	4534	70	4604	0
99	9573	4787	73	4860	0
100	10077	5039	77	5116	0
101	10581	5291	81	5372	0
102	11085	5543	85	5628	0
103	11590	5795	89	5884	0
104	12094	6047	93	6140	0
105	12598	6299	97	6396	0

Figure 11

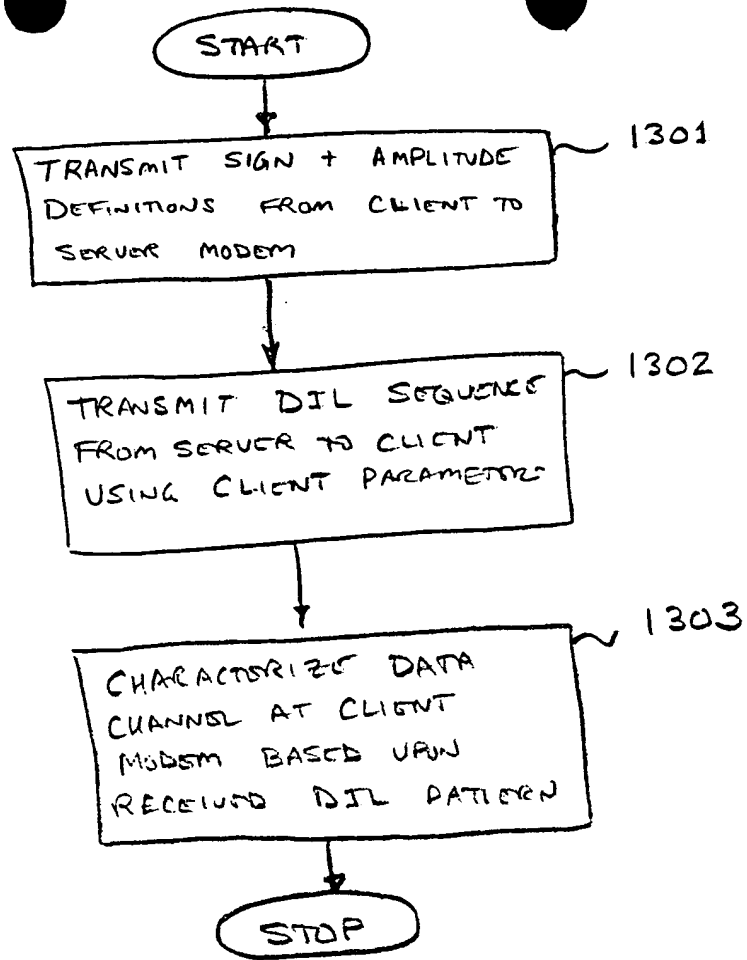


Figure 13